

## **REMARKS**

Upon entry of this amendment, claims 1, 3-8 and 20 are all the claims pending in the application. Non-elected claims 2 and 9-19 have been canceled by this amendment.

### **I. Objection to the Specification**

The Examiner has objected to the specification for the reasons set forth on page 2 of the Office Action. Applicant has amended the specification as requested by the Examiner. Accordingly, Applicant respectfully requests that the objection be reconsidered and withdrawn.

### **II. Claim Rejections under 35 U.S.C. § 103(a)**

A. Claim 1 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yasue (US 6,010,768). Applicant respectfully traverses this rejection on the following basis.

Claim 1 recites that complementary resin circuit patterns are formed on the semi-cured resin sheet, wherein the semi-cured resin sheet with the complementary resin circuit patterns complementary to the circuit patterns are included on a surface of the semi-cured resin sheet facing said circuit patterns.

In the Office Action, the Examiner has recognized that Yasue does not disclose or suggest the above-noted feature recited in claim 1 (see Office Action at page 3).

Nonetheless, in a conclusory manner, the Examiner has asserted that providing such a feature would have been “an obvious matter of design choice... because applicant has not disclose [sic] that having the complementary resin circuit patterns complementary to said circuit patterns formed on the semi-cured resin sheet and facing said circuit patterns provides an

advantage, is used for a particular purpose, or solves a stated problem” (see Office Action at page 3). Applicant respectfully disagrees with the Examiner’s position.

In particular, with respect to the above-noted feature drawn to the complementary resin circuit patterns, contrary to the position taken by the Examiner, Applicant notes that the specification clearly explains the advantage that is provided by such a feature, and the problem that has been solved by such a feature, at least at paragraph [0009] of the specification. In this regard, Applicant notes that paragraph [0009] of the specification sets forth the following:

According to the present invention, since the resin layer is pressed, even if the resin layer is gradually raised at a part where the circuit patterns are formed thereunder, the raised part is compressed so that the resin layer as a whole is made to thinly and evenly spread. Even if sparse and dense parts are present in the circuit patterns on the substrate, a semi-cured resin sheet with resin patterns complementary to the circuit patterns may be created beforehand. The resin patterns are located on the surface of the semi-cured resin sheet facing the circuit patterns, so that the resin layer as a whole is made to be substantially uniform regardless of the sparse and dense state of the circuit patterns. Since only a relatively thin resin layer remains on the circuit patterns when the resin is cured in this state, it is possible to obtain a substantially flat substrate with the circuit patterns exposed by polishing the circuit patterns at a strength that will not damage the circuit patterns. (Emphasis added.)

Regarding the above-noted disclosure, Applicant points out to the Examiner that the Background Art section of the specification describes in paragraph [0004] the problem that occurs with a typical resin layer in the presence of sparse or dense sections of circuit patterns on the substrate. In order to overcome this problem, the present invention utilizes the above-noted complementary resin circuit patterns, which as described above in paragraph [0009], provide an advantage over the conventional art, namely, that even in the presence of sparse or dense sections of circuit patterns on the substrate, the resin layer can be made substantially uniform.

In this regard, Applicant notes that the Federal Circuit has held that a claimed invention should not be rejected as a mere "design choice" when the Applicant presents evidence of the technical advantages of the Applicant's structure. See *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995). Here, as described above, Applicant's disclosure identifies the benefits that are obtained by utilizing complementary resin circuit patterns, namely, that even in the presence of sparse or dense sections of circuit patterns on the substrate, the resin layer can be made substantially uniform (see paragraph [0009] of the specification).

Therefore, because the above-noted feature drawn to the complementary resin circuit patterns confers technical advantages over the prior art, Applicant respectfully submits that such a feature would not have been a simple matter of design choice. In this regard, Applicant notes that the Examiner has not provided any factual basis as to why one of ordinary skill in the art would have modified Yasue so to provide such a feature.

Moreover, the Federal Circuit has expressly stated that all *per se* rules of obviousness are legally invalid and that the obviousness analysis must be based on the prior art:

The use of *per se* rules, while undoubtedly less laborious than a searching comparison of the claimed invention--including all its limitations--with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to *Graham* and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention as claimed in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations. (Emphasis added)

*In re Ochiai*, 71 F.3d 1565, 1572, 37 U.S.P.Q.2D (BNA) 1127, 1134 (Fed. Cir. 1995).

In this regard, Applicant notes that MPEP 2143 clearly explains that in view of the decision in *KSR International v Teleflex Inc.*, there must be a “clear articulation of the reason(s) why the claimed invention would have been obvious” (emphasis added). Further, MPEP 2143 also indicates that “rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” (emphasis added).

In the present case, Applicant submits that the above-noted statement by the Examiner indicating that it would have been an obvious matter of design choice to modify Yasue so as to provide the complementary resin circuit patterns of claim 1 is not a clear articulation of the reason why one of ordinary skill in the art would have modified Yasue in the manner suggested by the Examiner, and is not an articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Instead, the Examiner’s statement is merely conclusory.

In view of the foregoing, Applicant respectfully submits that Yasue does not disclose, suggest or otherwise render obvious the above-noted feature recited in claim 1 of complementary resin circuit patterns formed on the semi-cured resin sheet, wherein the semi-cured resin sheet with the complementary resin circuit patterns complementary to the circuit patterns are included on a surface of the semi-cured resin sheet facing said circuit patterns. Accordingly, Applicants submit that claim 1 is patentable over the cited prior art, an indication of which is kindly requested.

If the Examiner again rejects claim 1, Applicant respectfully requests the Examiner to identify relevant prior art which meets the requirements of the claim instead of mere assertions as to what would have been an obvious matter of design choice.

B. Claims 3, 4 and 20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yasue (US 6,010,768) in view of Applicant's Admitted Prior Art (AAPA).

Claims 3, 4 and 20 depend from claim 1. Applicant submits that AAPA fails to cure the deficiencies of Yasue, as discussed above, with respect to claim 1. Accordingly, Applicant submits that claims 3, 4 and 20 are patentable at least by virtue of their dependency.

C. Claims 5-8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yasue (US 6,010,768) in view of Applicant's Admitted Prior Art (AAPA), and further in view of Fukutomi et al. (US 6,268,648).

Claims 5-8 depend from claim 1. Applicant submits that Fukutomi fails to cure the deficiencies of Yasue and AAPA, as discussed above, with respect to claim 1. Accordingly, Applicant submits that claims 5-8 are patentable at least by virtue of their dependency.

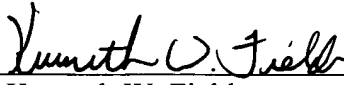
### **III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited.

If any points remain in issue the Examiner is kindly requested to contact the undersigned  
at the telephone number listed below.

Respectfully submitted,

Keiichi MURAKAMI

By   
Kenneth W. Fields  
Registration No. 52,430  
Attorney for Applicant

KWF/krq  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
June 4, 2008